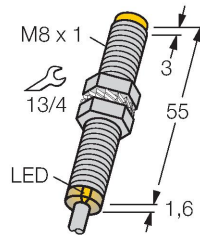


# NI2-G08-AN7X

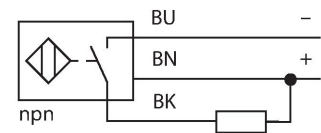
## Inductive Sensor



### Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4404
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- TTL compatible
- Cable connection

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

### Technical data

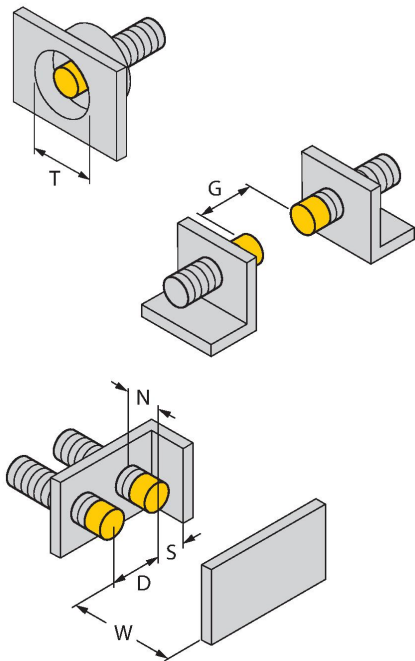
|                                        |                                                     |
|----------------------------------------|-----------------------------------------------------|
| Type                                   | NI2-G08-AN7X                                        |
| ID                                     | 47004                                               |
| General data                           |                                                     |
| Rated switching distance               | 2 mm                                                |
| Mounting conditions                    | Non-flush                                           |
| Secured operating distance             | $\leq (0.81 \times S_n)$ mm                         |
| Correction factors                     | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy                        | $\leq 2$ % of full scale                            |
| Hysteresis                             | 3...15 %                                            |
| Electrical data                        |                                                     |
| Operating voltage $U_b$                | 10...30 VDC                                         |
| Ripple $U_{ss}$                        | $\leq 10$ % $U_{Bmax}$                              |
| DC rated operating current $I_o$       | $\leq 150$ mA                                       |
| No-load current                        | $\leq 10$ mA                                        |
| Residual current                       | $\leq 0.1$ mA                                       |
| Isolation test voltage                 | 0.5 kV                                              |
| Short-circuit protection               | no                                                  |
| Voltage drop at $I_o$                  | $\leq 0.7$ V                                        |
| Wire break/reverse polarity protection | yes/yes (voltage supply)                            |
| Output function                        | 3-wire, NO contact, NPN                             |
| Switching frequency                    | 3 kHz                                               |
| Mechanical data                        |                                                     |
| Design                                 | Threaded barrel, M8 x 1                             |

Technical data

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Dimensions                            | 56.6 mm                                    |
| Housing material                      | Metal, 1.4404 (AISI 316L)                  |
| Active area material                  | Plastic, PA12-GF20                         |
| End cap                               | Plastic, PP                                |
| Max. tightening torque of housing nut | 5 Nm                                       |
| Electrical connection                 | Cable                                      |
| Cable quality                         | Ø 4 mm, LifYY-11Y, PUR, 2 m                |
| Core cross-section                    | 3 x 0.25 mm <sup>2</sup>                   |
| Environmental conditions              |                                            |
| Ambient temperature                   | -25...+70 °C                               |
| Vibration resistance                  | 55 Hz (1 mm)                               |
| Shock resistance                      | 30 g (11 ms)                               |
| Protection class                      | IP67                                       |
| MTTF                                  | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state                       | LED, Yellow                                |

Mounting instructions

Mounting instructions/Description



|                        |         |
|------------------------|---------|
| Distance D             | 3 x B   |
| Distance W             | 3 x Sn  |
| Distance T             | 3 x B   |
| Distance S             | 1.5 x B |
| Distance G             | 6 x Sn  |
| Distance N             | 2 x Sn  |
| Diameter active area B | Ø 8 mm  |

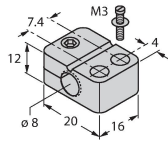
NI2-G08-AN7X | 02/21/2025 13-36 | technical changes reserved

## Accessories

BST-08B

6947210

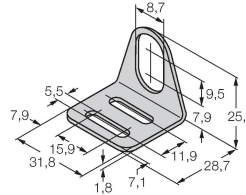
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW08

6945008

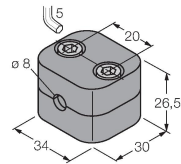
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



BSS-08

6901322

Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene



MBS80

69479

Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum

